



**Funded by the State Water Resources Control Board
and CalFed Bay-Delta Program**

Presentation Outline

✓ Program Background

✓ Goal

✓ Objectives

★ **Partnerships**

✓ Our Advice...



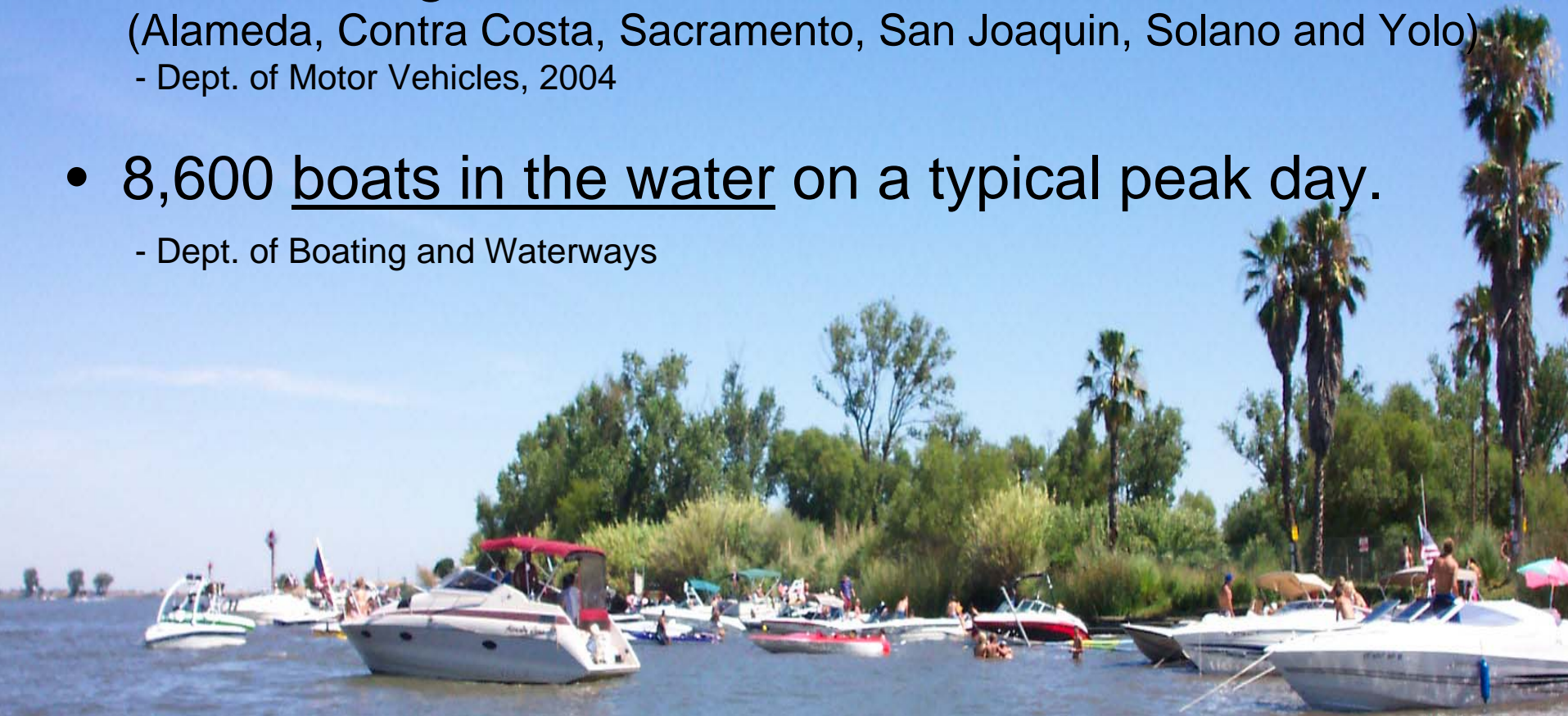
The Delta, A Precious Resource

- **Critical Habitat**: fish, wildlife, native & migratory birds
- **Irrigation Water**: 7 million acres of agricultural land
- **Drinking Water**: 450,000 County residents & over 22 million Californians
- **Recreation**: boating, fishing, bird watching, hunting, swimming, kayaking, windsurfing



Recreational Boating

- 57 marinas in Contra Costa County & ~150 throughout the Delta.
- 174,000 registered boats in 6 Delta Counties.
(Alameda, Contra Costa, Sacramento, San Joaquin, Solano and Yolo)
- Dept. of Motor Vehicles, 2004
- 8,600 boats in the water on a typical peak day.
- Dept. of Boating and Waterways



Delta Marina Partners

- Bethel Harbor
- Discovery Bay Yacht Harbor
- Lauritzen Yacht Harbor
- Lazy M Marina
- Sugar Barge Marina

Project
Boundary

CCWD Intake
Mallard Slough

Antioch
Intake

Rock Slough
Intake

LEGEND

● Urban Intake Locations

Participating Marinas

1 Bethel Harbor

2 Discovery Bay Yacht Harbor

3 Lauritzen Yacht Harbor

4 Lazy M Marina

5 Sugar Barge Marina

Indicates marinas with
wastewater pumpouts

*Contra
Costa
County*

State Water Project
(MWD, SCVWD, ACWD, Zone 7)

Central Valley
Project (City of
Tracy, others)

Old River
Intake

Other Partners

- California Coastal Commission
- Coast Guard Auxiliary
- Contra Costa Water District
- Department of Boating and Waterways
- Northern California Clean Boating Network
- Northern California Marina Association



Program Goal

Partner with the boating community to prevent and reduce potential NPS pollution that may be associated with recreational boating and marina operations.

Potential NPS Pollutants Targeted:

- **Pathogens**: overboard sewage disposal, lack of restroom facilities, & pet waste
- **Petroleum hydrocarbons**: contaminated bilge water, illegally disposed motor fluids, & improper fueling at docks
- **Other potentially harmful wastes**: engine & hull maintenance products & solvents, marine batteries, litter, & fish cleaning waste



Program Objective

1. Identify and install convenient and publicly accessible marina-based environmental services.

Partnerships:

- 5 Marina Partners
- California Integrated Waste Management Board
- California Coastal Commission
- City of Sacramento, Department of Utilities
- County Hazardous Materials Division
- County Maintenance Division
- County Real Property
- Department of Boating & Waterways
- Department of Toxics Substances Control
- Napa & San Joaquin Counties
- Northern California Marina Association



Marina Used Oil Recycling Centers



OIL ABSORBENT EXCHANGE CENTER



THIS CENTER ONLY ACCEPTS:

- ♻️ **Used Oil**
- ♻️ **Oil Filters**
- ♻️ **Used Oil Absorbents**
- ♻️ **Empty Used Oil Bottles**
- ♻️ **Marine & Auto Batteries**



Recycle all other hazardous materials at a
Household Hazardous Waste Collection Center.
For locations call 1-800-CLEANUP, www.earth911.org

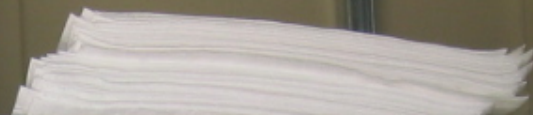
Nearest Contra Costa County Collection Center: 2500 Pittsburg-Antioch Hwy. (925) 756-1900

If Shed is Locked, See Marina Attendant

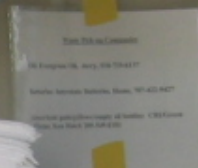


Funded by a grant from the State Water Resources Control Board and the California Bay-Delta Authority





PREVENT OIL POLLUTION



FREE ABSORBENT PILLOWS


FREE ABSORBENT SHEETS



Empty Oil Bottle Recycling

**Recycle Empty Plastic
Used Oil Bottles Here**



**Also acceptable any
EMPTY  bottles
EMPTY milk jugs
EMPTY coolant bottles
EMPTY containers from new oil,
transmission and hydraulic fluids**

Provided by a grant from the State Water Resources Control Board and the California Bay-Delta Authority

2"x11" sticker

NO TRASH!



Oil Absorbent Exchange Program



OIL ABSORBENT EXCHANGE PROGRAM

**Boaters, Pick Up Your
Free Oil Absorbents**

**LET'S KEEP THE
DELTA CLEAN**

by using an Oil Absorbent
in the bilge to capture leaks and
drips from your boat engine.



1. Take Only What You Need
2. Drop Used Oil Absorbents into the **Red "Absorbent Only" Recycling Can** or Ask the Marina Attendant
3. See Absorbent Pillow Cover for Other Marinas Participating in the Oil Absorbent Exchange Program

**Call 1-800-CLEANUP (www.earth911.org) for Other
Oil Absorbent Distribution and Disposal Locations**

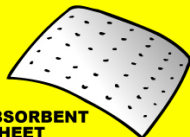


Funded by a grant from the State Water Resources Control Board and the California Bay-Delta Authority



**USED OIL
ABSORBENTS
ONLY**

NO TRASH!



OIL ABSORBENT
SHEET



OIL ABSORBENT
PILLOW



Provided by a grant from the
State Water Resources Control Board and the California Bay-Delta Authority



Program Objective

2. Educate recreational boaters about clean and safe boating while promoting new environmental services.

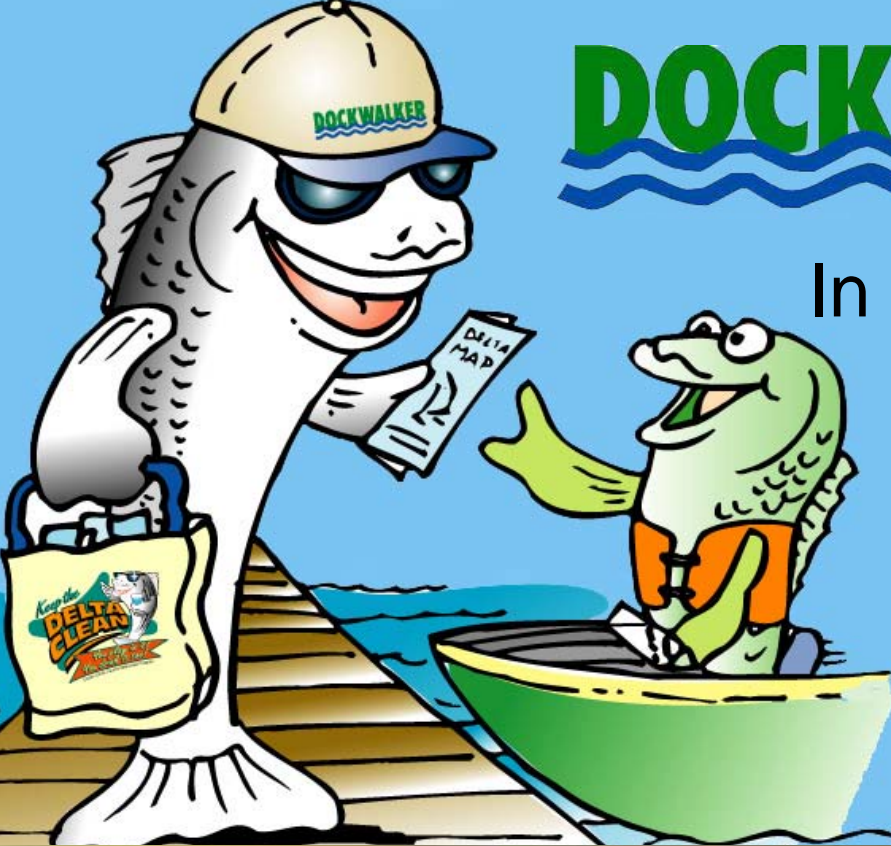
Partnerships:

- 5 Marina Partners & Other Delta Marinas
- California Coastal Commission
- Coast Guard Auxiliary
- Department of Boating & Waterways
- Department of Fish and Game
- Delta Protection Commission
- Volunteer Dockwalkers
- Northern California Marina Association
- Regional Water Quality Control Board
- San Joaquin County
- West Marine



Educating One Boater at a Time





DOCKWALKER

In partnership with ...



10,000 Free Boater Kits for 2005 & 2006

- **Educational literature & boating resources:** Clean Boating Habits, ABC's of CA Boating Law, Threats to the West, tide book, West Marine coupon
- **Promotional items with campaign slogan:** visor, floating key chain, drink cozy, safety flag
- **Oil Absorbent Pillow**
- **Delta Map for Recreational Boating:** Promoting marinas, environmental services, oil collection centers



Program Objective

3. Partner with local harbor masters to explore useful and practical pollution prevention systems.

Partnerships:

- 5 Marina Partners
- Boy Scouts of America
- California Coastal Commission
- City of Sacramento, Department of Utilities
- Contra Costa County Hazardous Materials Division
- Department of Boating & Waterways
- Northern California Marina Association
- Regional Water Quality Control Board



Fish Cleaning Stations



Before



After

Leak-proof Dock Boxes & Inserts



Hazardous wastes are toxic to human health and aquatic life.
Store and dispose of properly.

Call **1-800-CLEANUP** or visit www.earth911.org
for disposal locations and clean boating tips.



*This leak-proof dock box was funded by a grant from the
State Water Resources Control Board and the California Bay-Delta Authority*



Pet Waste Disposal Stations



**PLEASE PICK UP
AFTER YOUR PET**

Pet waste can degrade water quality when washed into the Delta during rain events.

**Take a
Pet Waste Bag**

**Tie Bag and
Place in Trash**

Please Keep Your Pets on a Leash.



Funded by a grant from the State Water Resources Control Board and the California Bay-Delta Authority



Educational Signage & Kiosks



**Be a Part of the Solution,
Choose Less Toxic Cleaning
and Maintenance Products**

- Use more elbow grease and less product. Buy only what you need.
- Choose phosphate and chlorine-free products that are non-toxic and environmentally safe.
- Choose less toxic anti-fouling bottom paints & coatings.
- Avoid boat maintenance on the docks or over the water.

Learn More About Clean Boating at:
www.coast4u.org • www.earth911.org

Keep the DELTA CLEAN
You play in it, you drink it too!
Coastal Cleanup Center's water quality program
www.coast4u.org

Coastal Cleanup Center is a 501(c)(3) non-profit organization. All funds raised go to support our programs.

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Marina Operator Technical Assistance

- Stormwater Pollution Prevention Plan
- Spill Response Plan and Staff Training
- Marina Environmental Policy
- Boat Maintenance Contractor Policy



Program Objective

4. Create a local forum for collaboration to sustain and improve boater education in the Delta.

Partnerships:

- 5 Marina Partners
- California Coastal Commission
- City of Sacramento, Department of Utilities
- Delta Keeper
- Department of Boating & Waterways
- Department of Fish and Game
- Department of Health Services (EHIB)
- Green Flame Services
- Northern California Marina Association
- Recreational Boaters of California
- San Francisco Estuary Project
- San Joaquin County
- Santa Monica Bay Restoration Foundation
- State Lands Commission



California Clean Boating Network

4 Chapters

✓ Northern Ca.

✓ Central Coast

✓ Southern Coast

★ NEW Sacramento -
San Joaquin Delta

THE CHANGING TIDE
Volume 10/4
Santa Monica Bay Restoration Commission
PLASTICS ARE FOREVER

THE CHANGING TIDE
April 2006
CO - Carbon Monoxide
Boaters: Protect Yourself from this Silent Killer!

Clean Boating Online
at Earth911.org

In 2001, the CCBN partnered with Earth911 to design a "Clean Boating Website" and toll-free telephone hotline.

www.earth911.org

1-800-CLEANUP

Enter your zip code at www.earth911.org and find:

Clean Boating Services at Earth911 in Motion:

- ♣ Absorbent pad distribution
- ♣ Absorbent pad disposal
- ♣ Oil spill pump-outs
- ♣ Storage pump-outs
- ♣ Use of marine motor oil is spilling
- ♣ Marine oil leaks

Tips for Clean Boating

- ♣ Learn easy ways to be a clean boater

Clean Boating Suggestions

- ♣ Do not use maintenance and proper fueling procedures can make a difference.

Links

- ♣ Learn about other Clean Boating programs

"Toak Surfing"

Carbon monoxide can turn a fun outing deadly.

"Toak surfing" or "platform dragging" is a nationwide fad that involves pulling a person through the boat's wake while they hold onto the boat's stern. It's the latest new thing on our waterways but it's dangerous, and now it's also illegal.

"Toak surfers are exposed to carbon monoxide from the boat's engine exhaust," said Cal Boating Director Rayner Tameyoshi. "It's colorless and odorless, so people don't know it's there, but they can lose consciousness in seconds and die."

Between 1990 and 2004, 571 boating-related carbon monoxide (CO) poisonings were reported nationwide, including 113 deaths. Forty-three poisonings occurred in California. Because CO poisoning is only recently receiving attention, it is likely that many other deaths that have been attributed to drowning or heart attack may have been caused by CO.

Effective January 1, 2005, California law prohibits boat operation from running the engine while someone is toak surfing or body surfing behind the vessel or on the swim step or swim ladder where they are exposed to boat exhaust containing carbon monoxide.

Control and no boat

Swim Platform Exhaust Ports

Although most plastics come from abandoned inputs, here's a list of what boaters can do to help keep waterways clean and clear of all debris:

- Take it back policy that NO trash is discarded overboard. Federal and international laws prohibit the discharge of plastic trash in the ocean.
- Encourage your dock or marina to provide adequate garbage cans and recycling bins.
- Small trash compartments on large vessels.
- Retrieve loose trash encountered in a water or on shore.
- Join your concern with others and encourage them to help.
- Participate in local beach and harbor sweeps, and leave the waters clean for your visit.

Clean Boating Network Publication
Presented by the
Santa Monica Bay Restoration Foundation,
Marine Conservation Council, Save Our Shores,
Community Environmental Council
in cooperation with the
Department of Boating and Waterways
and the California Integrated Waste Management Board

A Clean Boat is a Clean Boating Network Publication
Presented by the
Santa Monica Bay Restoration Foundation,
California Coastal Commission, Save Our Shores,
and the Community Environmental Council
in cooperation with the
California Department of Boating and Waterways
and the California Integrated Waste Management Board

Program Objective

5. Attempt to measure pollution prevention and reduction.

Partnerships:

- 5 Marina Partners
- Bay Keepers
- California Coastal Commission
- Contra Costa County Marine Patrol
- Contra Costa County Water District
- Delta Keeper
- Department of Boating & Waterways
- City of Sacramento, Department of Utilities
- Northern California Marina Association



Measuring Pollution Prevention

- Initial Water Quality Monitoring Program was inconclusive.
- Attempt to build model to estimate NPS pollution reductions:
 - **Input data** (historical water quality, recreational usage, demographics, other field data)
 - **Pollution prevention services & education** (level of implementation, usage, and effectiveness)
 - **Ground truthing** (physical observations, surveys, aerial photos)
 - **Existing literature and models** (e.g. lab and field-measured vitalization rates and hydrodynamic models).



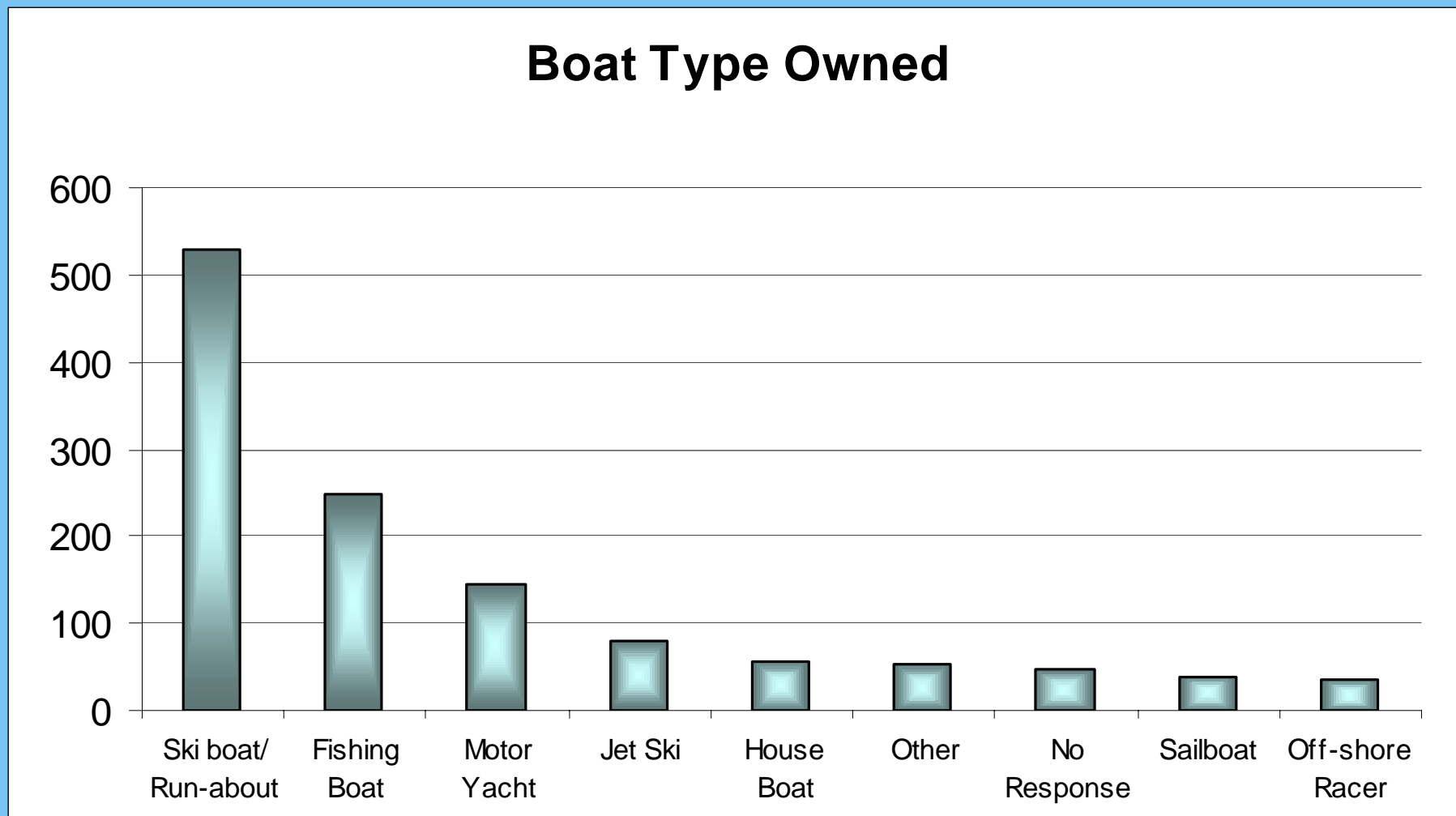
Recreational Boater Survey

- Understand boaters' maintenance practices
- Boater perception of water quality impacts
- Identify gaps in marina-based environmental services
- Improve future education efforts



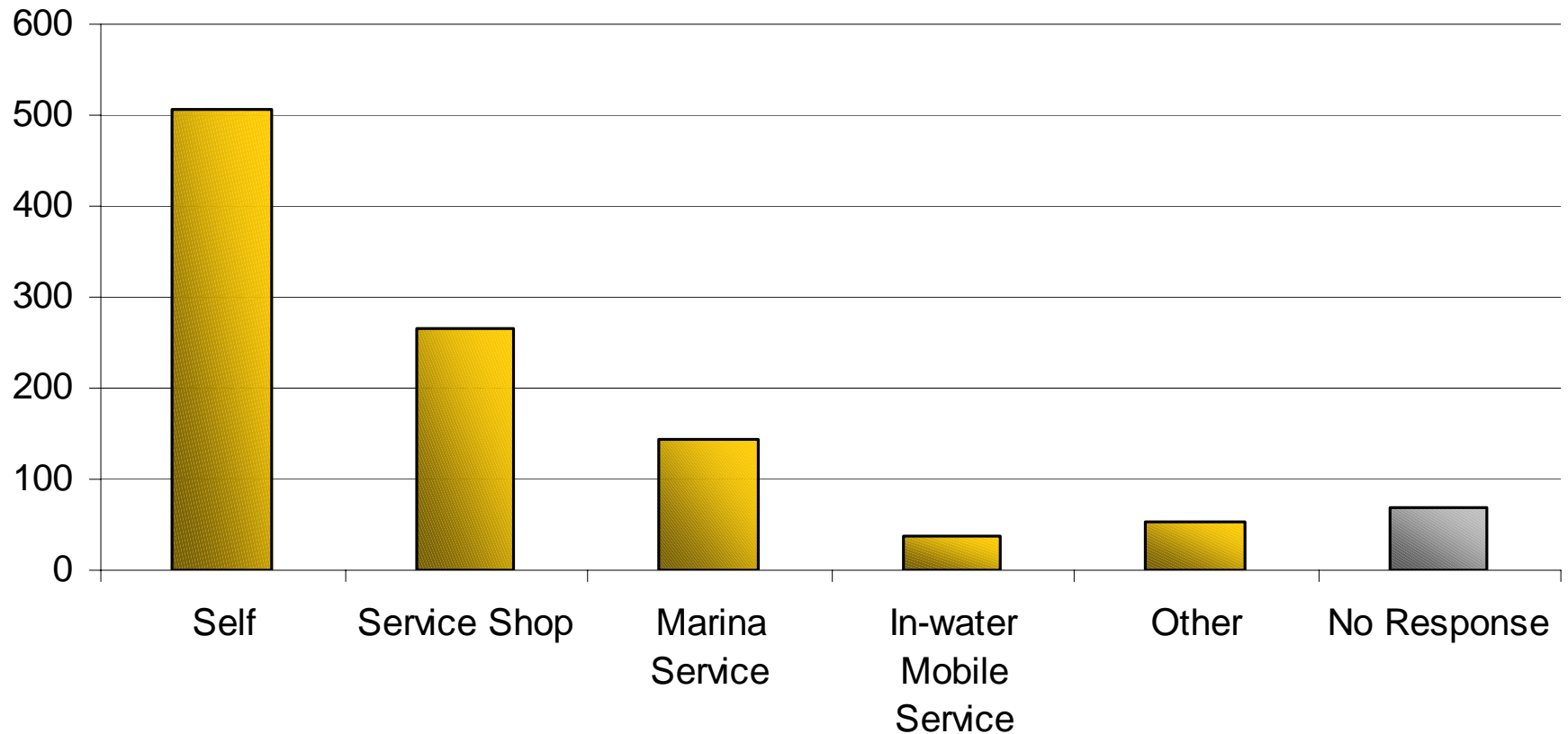
Preliminary Survey Results from ~ 1,000 surveys

What type of boat do you currently own?



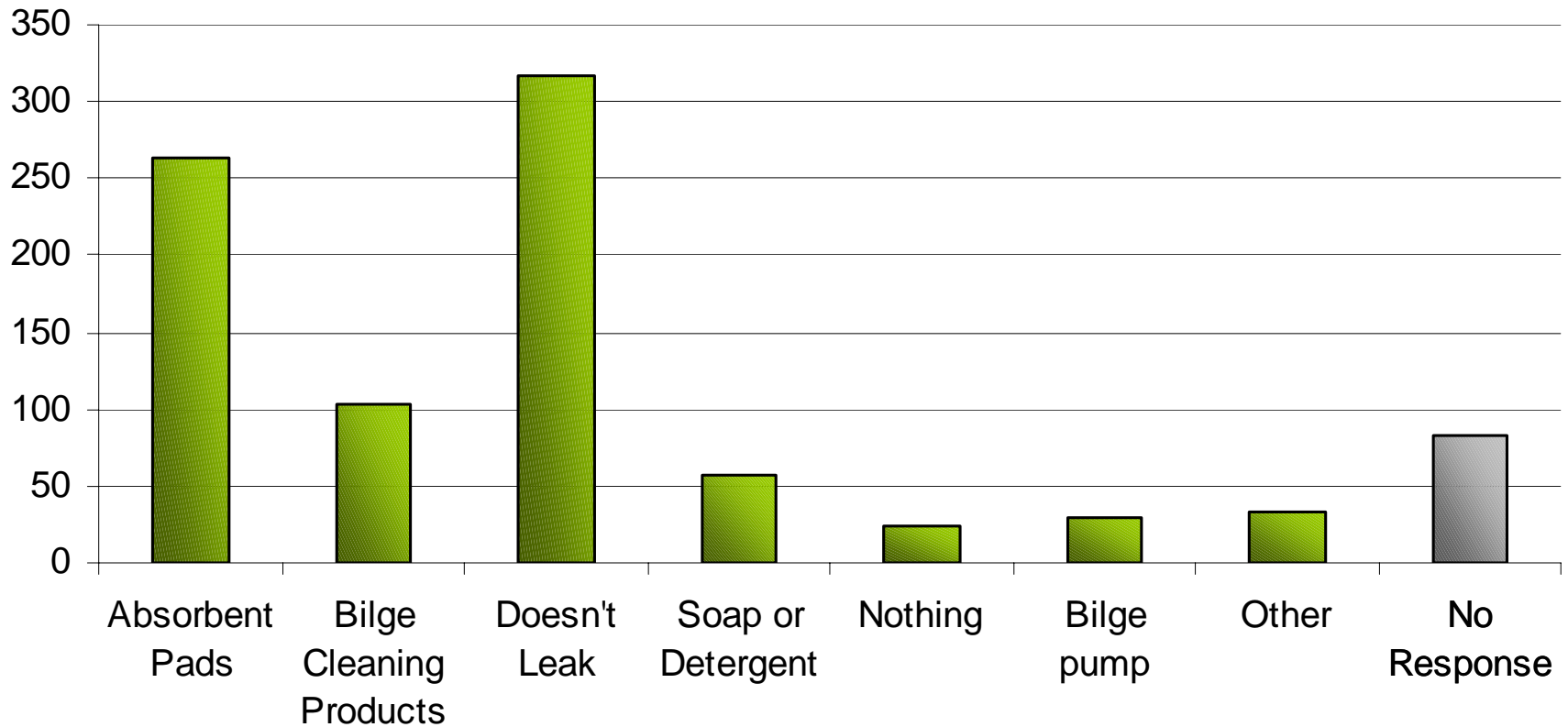
Who usually changes the motor oil in your boat?

Method of Oil Change



How do you clean oil that has spilled into the bottom of your boat or bilge?

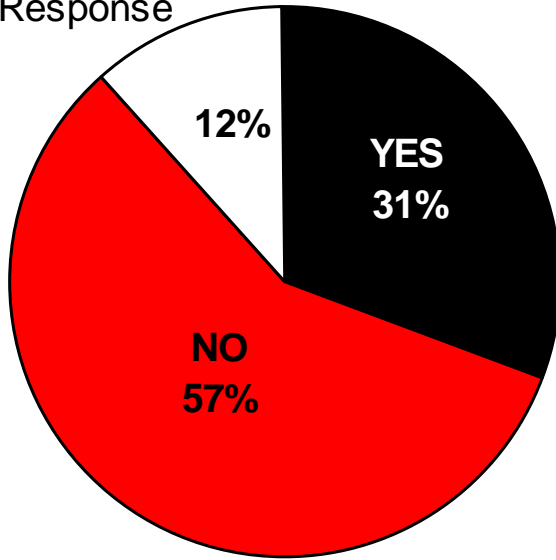
Oil Spill Cleaning Method





Sewage Pumpout Logo Comprehension

No Response

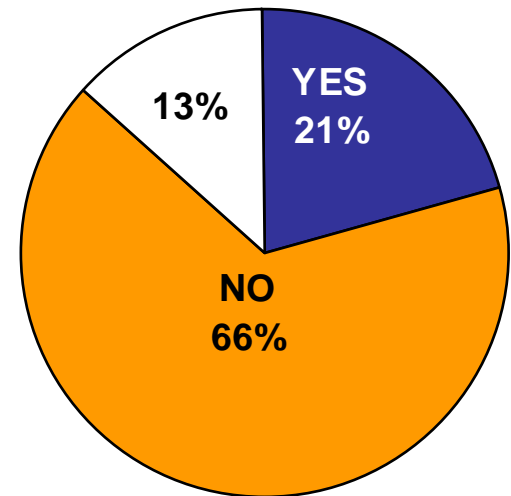


Do you know what this logo stands for?

If yes, what is the meaning?



Used Oil Recycling Logo Comprehension



Our Advice...



1. Be prepared for delays in the state contracting process.
2. Quarterly reports are fun, keep up.
3. Build enough \$ into the budget for adequate staff support.
4. If you don't have a crystal ball have contingencies ready (schedule & resources)

Proven Successes...

1. Approach ALL stakeholders early in the planning process. Seek out the experts in that industry.
2. Ensure you approach local community and private industry stakeholders with a non-regulatory mentality.
3. Design program with sustainability in mind.
4. Maintain close communication with partners and granting agencies.
5. Talk the Talk and Walk the Walk.



Keep the Delta Clean.

**Tonya Redfield
Contra Costa County
Public Works
255 Glacier Drive
Martinez, CA 94552
925/313-2313
tredf@pw.cccounty.us**

You Play In It. You Drink It Too!